



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/775,510

02/10/2004

Denise Marie Beachy

J3711(C)

1049

201 7590 05/13/2008
UNILEVER PATENT GROUP
800 SYLVAN AVENUE
AG West S. Wing
ENGLEWOOD CLIFFS, NJ 07632-3100

EXAMINER

CHUI, MEI PING

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

05/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/775,510	Applicant(s) BEACHY ET AL.	
	Examiner MEI-PING CHUI	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 3,5,9-11,13-15,17 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-8,12,16,18-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/30/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Action

- (1) Receipt of Amendments/Remarks filed on 01/30/2008. Claims 1, 4 and 6 have been amended.
- (2) Receipt of IDS filed on 01/30/2008 is acknowledged and it has been considered by the Examiner.

Status of Claims

Accordingly, 1-2, 4, 6-8, 12, 16, 18-20 and 22-24 are presented for examination on the merits for patentability as they read upon the elected subject matter and claims 3, 5, 9-11, 13-15, 17 and 21 directed to a non-elected species are withdrawn.

Withdrawn rejections/objections

The previous rejection with respect to claim 6, under *35 U.S.C. 112 second paragraph*, is

withdrawn in view of the amendment filed on 01/30/2008 (see Remarks: page 7).

DOUBLE PATENTING

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 16, 18-20 and 22-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-43 and 48-51 of co-pending U.S. Patent Application No. 11/316,596.

The instant claims 1, 16, 18-20 and 22-23 are directed to an anhydrous antiperspirant composition comprising (i) a particulate aluminum/zirconium complex, (ii) a water-immiscible carrier fluid comprises an aryl substituted siloxane and, (iii) optionally, a fiber-forming gallant;

The claims 1-43 and 48-51 of co-pending U.S. Patent Application No. 11/316,596 are also directed an anhydrous antiperspirant composition comprising (i) a particulate aluminum and zirconium salt, (ii) a water-immiscible carrier fluid comprises non-volatile silicone oil, and (iii) a fiber-forming amide gellant.

The instant and the conflicting claims only differ in that the instant claim 1 recites the carrier fluid comprises an aryl substituted siloxane with the formula: $R^1R^A_2Si-O-[SiR^2R^A-O]_n-SiR^3R^A_2$, wherein $n = 0$ to 2 ; R^1 , R^2 and R^3 may be the same or different from each other, and each R^1 , R^2 and R^3 represents: (a) a group R^4 of formula: $-CH_2-C(Ph)(R^B)-R^5-Ph$, in which $R^B = H$ or CH_3 , and $R^5 =$ an alkylene containing from 0 to 3 carbon atoms, optionally branched; and $R^A = C_1-C_4$ alkyl group provided that at least 60% of carbon atoms in total substituted groups R^A and R^4 are present in aryl group.

Art Unit: 1616

The conflicting claim 1 of co-pending U. S. Patent Application No. 11/316,596 recites non-volatile silicone oil. However, the conflicting dependent claim 9 of the co-pending application further recites that the non-volatile silicone oil comprises an aryl substituted siloxane with the formula: $R^1R^A_2Si-O-[SiR^2R^A-O]_n-SiR^3R^A_2$. The conflicting claim 9 also recites that $n = 0$ to 2 ; R^1 , R^2 and R^3 may be the same or different from each other, and each R^1 , R^2 and R^3 represents: (a) a group R^4 of formula: $-CH_2-C(Ph)(R^B)-R^5-Ph$, in which $R^B = H$ or CH_3 , and $R^5 =$ an alkylene containing from 0 to 3 carbon atoms, optionally branched; and $R^A = C_1-C_4$ alkyl group and $R^A = C_1-C_4$ alkyl group provided that at least 60% of carbon atoms in total substituted groups R^A and R^4 are present in aryl group.

Therefore, one of ordinary skill in the art, at the time the claimed invention was made, would have readily recognized that claims 1, 16, 18-20 and 22-23 in the instant application embrace the claims 1-43 and 48-51 of co-pending U.S. Patent Application No. 11/316,596, thus they are not patentability distinct.

The previous provisional rejection with respect to claims 1, 16, 18-20 and 22-23 on the ground of nonstatutory obviousness-type double patenting, as being unpatentable over claims 1-43 and 48-51 of co-pending U.S. Patent Application No. 11/316,596, is maintained.

Response to Arguments

Applicants' arguments filed on 01/30/2008 have been fully considered but they are not persuasive.

Applicants argue that the provisional rejection on the ground of nonstatutory obviousness-type double patent for instant claims 1, 16, 18-20 and 22-23 over claims 1-43, and 48-51 of the copending U. S. Patent Application No. 11/316,596 should be mooted in view of the amendment of claim 1 of the instant application (see Remarks: page 7).

Applicants' arguments have been fully considered but they are persuasive because the claimed components recited in the instant claims are embraced by the claims of the co-pending U. S. Patent Application No. 11/316,596. Therefore, one of ordinary skill in the art, at the time the claimed invention was made, would have readily recognized that claims 1, 16, 18-20 and 22-23 in the instant application and the claims 1-43 and 48-51 of co-pending U.S. Patent Application No. 11/316,596 are not patentability distinct.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill

Art Unit: 1616

in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4, 6-8, 12, 18-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGlone et al. (U. S. Patent No. 6,503,492) in view of Powell, V. V. (WO 00/27348).

Applicant Claims

Applicants claim an anhydrous antiperspirant composition comprising a particulate aluminum/zirconium complex, a water-immiscible carrier fluid comprises an aryl substituted siloxane and, optionally, a fiber-forming gallant for the carrier fluid.

Determination of the scope and content of the prior art (MPEP 2141.01)

McGlone et al. teach an antiperspirant cosmetic composition comprising an antiperspirant active, i.e. aluminum/zirconium complex, and a carrier for the antiperspirant (column 3, line 15-21).

McGlone et al. teach the proportion of the antiperspirant active is present in an amount from 1 % to 35 % by weight of the composition (column 5, line 12-14). McGlone et al. also teach that the antiperspirant active can be an aluminum/zirconium complex, i.e. aluminum/zirconium chlorohydrate complex with glycine (column 5, line 20, 25 and 29; column 14, line 34; and Table 10, line 33-34 and 58).

McGlone et al. further teach that the antiperspirant active can be present in the form as particulate, whereupon it is suspended in a suitable water-immiscible carrier fluid, and which can be structured or thickened (column 5, line 31-34).

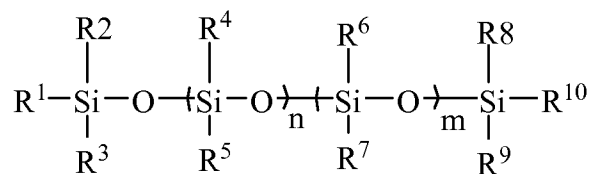
McGlone et al. teach that the carrier material for the composition may be a fluid or a mixture of fluid. It can also comprise one or more of volatile carrier fluids, or non-volatile emollients, in an amount of 5 % to 90 % by weight of the composition (column 5, line 62-64, and column 6, line 21-22). McGlone et al. also teach that the non-volatile emollient can be poly-organosiloxanes, i.e. poly-alkylarylsiloxanes (column 6, line 54-58), which is an aryl substituted siloxane.

McGlone et al. teach the composition also comprises a fiber-forming gallant as the structurant. McGlone et al. further teach that the suitable gallants include N-acyl amino acid amides, preferably N-lauroyl-L-glutamic acid di-n-butylamide (column 7, line 20-24) in an amount from 0.1 to 25 % by weight (column 7, line 54).

Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)

(1) Although McGlone et al. teach the carrier fluid can be poly-alkylarylsiloxanes, i.e. aryl substituted siloxane, McGlone et al. do not explicitly teach the structure of the poly-alkylarylsiloxane. However, this deficiency is cured by the teaching of Powell

Powell et al. teaches an aralkylsiloxane as a component used in a personal care composition, i.e. antiperspirants (page 1, line 13-15 and page 6, line 8-9), which has a formula (as below), wherein n and m in the formula can be zero, the substituent R¹ and R¹⁰ each can be phenylethyl group; R², R³, R⁸ and R⁹ each can be C₁-C₆ alkyl, or preferably, a methyl group (page 3, line 3 and 6; and page 4, line 16, 19, 21-23).



Powell et al. also teaches that the aralkylsiloxane is present in the composition, based on the molecular weight of the aralkylsiloxane, from about 25 to 65 % by weight (page 5, line 12-13).

Finding of prima facie obviousness Rational and Motivation

(MPEP 2142-2143)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McGlone et al. and Powell, and utilize aralkylsiloxane as an antiperspirant component to arrive at the instant claimed invention.

One of ordinary skill would have been motivated to include an effective amount of aralkylsiloxane in the antiperspirant composition, with a reasonable expectation of success because the addition of aralkylsiloxane would promote shiny, emolliency and lubricity of the antiperspirant composition and aids in visually masking inorganic impurity present in the composition, as suggested by Powell et al.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because the combined teachings of the prior art fairly suggests the instant claims.

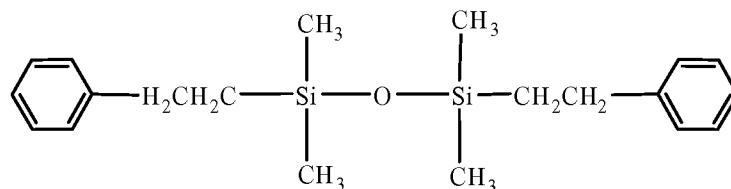
The previous rejection with respect to claims 1, 2, 4, 6-8, 12, 18-20, 22 and 23, under 35 U.S.C. 103(a) as being unpatentable over McGlone et al. (U. S. Patent No. 6,503,492) in view of Powell, V. V. (WO 00/27348), is maintained.

Response to Arguments

Applicants' arguments filed on 01/30/2008 have been fully considered but they are not persuasive.

(1) Applicants argue that McGlone et al. do not teach the substituted siloxanes having a particular substituted phenylalkyl group as required by the subject claims, in which the number and amount required by the instant invention, give rise to substituted siloxane having a high density of phenyl moieties such that at least 60% of the carbon present in the siloxane is present in aryl units (see Remarks: page 8, last paragraph and page 9, lines 1-3).

Applicants' arguments have been fully considered but they are persuasive. McGlone et al. do not teach the substituted siloxane having a particular substituted phenylalkyl group, this deficiency is cured by the teaching of Powell et al. Powell et al. teach an aralkylsiloxane (see below) as a component used in a personal care composition, i.e. antiperspirants (page 1, line 13-15 and page 6, line 8-9), which has phenylethyl substituent in the structure (page 3, line 3 and 6; and page 4, line 16, 19, 21-23):



Based on the substituted siloxane structure, as taught by Powell et al., 60% of the carbon atoms relative to the total carbon atoms in the aralkylsiloxane is contributed by the phenyl

Art Unit: 1616

moieties. Therefore, it meets the limitation of 60 % or more carbon atoms is present in aryl groups as claimed in the instant claims.

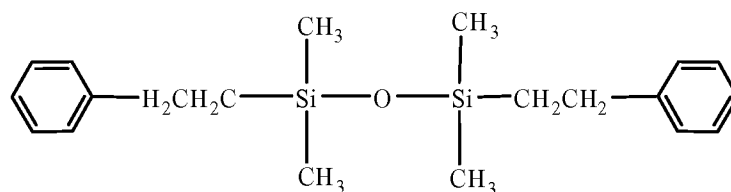
(2) Applicants next argue that Powell et al. do not teach the aralkylsiloxane structure that has the particular R⁴ group in the aralkylsiloxane as instantly claimed. The combination of the particular aralkylsiloxane with other compositional requirements of claim 1, results in the siloxane of formula 1, which has a very high density of phenyl groups with at least 60% of the carbon atoms present in such siloxane being present in aryl groups. The resulting aralkylsiloxane has desirably high refractive index, for example, 1.54-1.58. In contrast, the bis(2-phenylpropyl)siloxane (the preferred siloxane of Powell et al., and the siloxane exemplified in its antiperspirant Examples), the amount of carbon atoms present in aryl groups is only about 30%. With respect to refractive index, at page 5, lines 9 to 11, Powell et al. reports that in a highly preferred embodiment, the aralkyl content of the aralkylsiloxane is selected to provide a refractive index of from 1.40 to 1.50, more preferably from about 1.44 to 1.48, at 25°C, which refractive index values are lower than those of many antiperspirant actives, in particular, many zirconium-containing actives; therefore, the combination of McGlone et al. and Powell et al. fails to disclose or suggest antiperspirant composition having the high phenyl density siloxane as described by the amended claims.

Applicants' arguments have been fully considered but they are not persuasive.

Firstly, although Powell et al. teach an aralkylsiloxane, which contains a phenylpropyl group, Powell et al. also teach other aralkylsiloxane(s), i.e. phenylethyl containing aralkylsiloxane (see structure below), in that 60% of the carbon atoms in the phenylethyl

Art Unit: 1616

containing aralkylsiloxane relative to the total carbon atoms in the structure are contributed by the phenyl moieties:



Secondly, although Powell et al. teach an aralkylsiloxane containing phenylethyl groups, not diphenylethyl groups; however, it is known in the prior art that the difference between the refractive index of the carrier fluid mixture and the suspended antiperspirant active plays a crucial role in determining the translucent or opaque property of an antiperspirant composition, and the refractive index of siloxane compounds can be increased by incorporating more aryl units into the siloxane compound. For example, Chuah et al. (U. S. Patent Application Publication No. 2004/0213748) teach that a significant factor in determining whether a formulation is translucent or opaque is the difference between the refractive index of the carrier mixture and that of the suspended antiperspirant salt. The mismatch in refractive index can be controlled by a number of treatments to the antiperspirant active and by suitable selection of the carrier fluids (page 7, [0109]). In addition, Chuah et al. also teach that the refractive index of the silicone carrier fluid can be increased by increasing the proportion of aromatic contents relative to aliphatic content (page 7, [0109]).

Art Unit: 1616

Furthermore, Raleigh et al. (U. S. Patent No. 5,541,278) teach that high refractive index siloxane can be achieved by incorporating aryl-modified siloxy units into a relatively low refractive index siloxane, and the resulting siloxane exhibits excellent optical property that makes them suitable for use in many applications requiring materials having a high refractive index (column 1, lines 32-38).

Although Powell et al. do not explicitly teach the use of addition aryl unit in the siloxane to increase the refractive index that can match with the refractive index of an antiperspirant active; however, the concept of increasing the number of aryl group in siloxane carrier fluid structure would increase its refractive index, and the concept of the refractive index matching would affect a subject's transparency property have been known in the prior arts. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McGlone et al. and Powell et al. and utilize an aralkylsiloxane, which has a high phenyl content, with an antiperspirant active that have a relatively similar refractive index to arrive at the instant claimed invention.

From the teachings of the reference, it is obvious that one of ordinary skill in the art would have had a reasonable expectation of success to arrive at the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Claims 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGlone et al. (U. S. Patent No. 6,503,492) and Powell et al. (WO 00/27348), and further in view of Chuah et al. (WO 03/005977).

Applicant Claims

Applicants claim an anhydrous antiperspirant composition, which has a hardness of at least 0.003 N/mm^2 , comprising a particulate aluminum/zirconium complex and a water-immiscible carrier fluid comprises an aryl substituted siloxane, wherein the carrier fluid and antiperspirant active have refractive index matching within 0.005 units.

Determination of the scope and content of the prior art (MPEP 2141.01)

The teachings of McGlone et al. and Powell have been set forth above. Essentially, McGlone et al. teach an antiperspirant composition comprising an antiperspirant active and a carrier comprises an aryl substituted siloxane for the antiperspirant; and Powell teaches a structure of the aryl substituted siloxane, which has diphenylethyl and methyl substituent in the structure.

Chuah et al. teach an anhydrous antiperspirant formulation in the form of a soft solid comprising a particulate antiperspirant salt and anhydrous carrier fluid. Chuah et al. also teach

Art Unit: 1616

that the soft solid formulation has a hardness of from 3×10^{-3} to 5×10^{-3} N/mm² as measured by a sphere indentation technique (page 4, line 22-27).

Chuah et al. also teach that the translucent characteristic of the antiperspirant formulation, described therein, is determined by the difference of the refractive index between the carrier and the suspended antiperspirant salt, described therein, is in the range of 0.03 to 0.08 units (page 27, line 8-12 and line 26-30).

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

The combined teachings of McGlone et al. and Powell do not explicitly teach the antiperspirant composition has a hardness of at least 0.003 N/mm² measured by sphere indentation and the refractive index difference the carrier fluid and the suspended antiperspirant active is within 0.005 units. However, this deficiency is cured by the teaching of Chuah et al.

Chuah et al. teach an anhydrous antiperspirant formulation in the form of a soft solid comprising a particulate antiperspirant salt and anhydrous carrier fluid. Chuah et al. also teach that the soft solid formulation has a hardness value from 3×10^{-3} to 5×10^{-3} N/mm² as measured by a sphere indentation technique (page 4, line 22-27).

Chuah et al. also teach that the translucent characteristic of an antiperspirant formulation is determined by the difference of the refractive index between the carrier and the suspended

Art Unit: 1616

antiperspirant salt, in which their difference can be matched within the range of 0.003 to 0.08 units (page 27, line 8-12 and line 26-30).

Chuah et al. also teach that a significant factor in determining whether a formulation is translucent or opaque is the difference between the refractive index of the carrier mixture and that of the suspended antiperspirant salt. The mismatch in refractive index can be controlled by a number of treatments to the antiperspirant active and by suitable selection of the carrier fluids (page 7, [0109]). In addition, Chuah et al. also teach that the refractive index of the silicone carrier fluid can be increased by increasing the proportion of aromatic contents relative to aliphatic content (page 7, [0109]).

Finding of prima facie obviousness Rational and Motivation

(MPEP 2142-2143)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McGlone et al. and Powell, which utilize aralkylsiloxane in combination with an antiperspirant active, and further to combine the teaching of Chuah et al. to modify the hardness and transparency to arrive at the instant claimed invention. One of ordinary skill would have been motivated to match the difference of the refractive index of the carrier fluid and the antiperspirant active within the range of 0.005 units, with a reasonable expectation of success, because the refractive index difference between the carrier fluid and the antiperspirant active determines the transparency of the antiperspirant formulation, and that difference can be modified or adjusted by changing the number of aryl units in the siloxane

Art Unit: 1616

carrier fluid in order to achieve the siloxane carrier fluid with a desirable refractive index that matches the refractive index of a desired antiperspirant active, as taught by Chuah et al.

One of ordinary skill would also have been motivated to modify the hardness of the antiperspirant composition to at least 0.003 N/mm^2 , with a reasonable expectation of success depends on the desired form, i.e. soft solid, spray, liquid or cream, of the antiperspirant product to be formulated.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because the combined teachings of the prior art fairly suggests the instant claims.

The previous rejection with respect to claims 16 and 24, under 35 U.S.C. 103(a) as being unpatentable over McGlone et al. (U. S. Patent No. 6,503,492) and Powell et al. (WO 00/27348), and further in view of Chuah et al. (WO 03/005977), is maintained.

Response to Arguments

Applicants' arguments filed on 01/30/2008 have been fully considered but they are not persuasive.

Applicants argue that Chuah et al. do not disclose or suggest the use of high phenyl density siloxane as instantly claimed (see Remarks: page 11).

Applicants' arguments have been fully considered but they are persuasive because Chuah et al. suggest that a significant factor in determining whether a formulation is translucent or

Art Unit: 1616

opaque is the difference between the refractive index of the carrier mixture and that of the suspended antiperspirant salt. The mismatch in refractive index can be controlled by a number of treatments to the antiperspirant active and by suitable selection of the carrier fluids (page 7, [0109]). In addition, Chuah et al. also teach that the refractive index of the silicone carrier fluid can be increased by increasing the proportion of aromatic contents relative to aliphatic content in the carrier fluid (page 7, [0109]). Although the combined teachings of McGlone et al. and Powell et al. do not explicitly teach the use of addition aryl unit in the siloxane to increase the refractive index that can match with the refractive index of an antiperspirant active; however, the concept of increasing the number of aryl group in siloxane carrier fluid structure would increase its refractive index, and the concept of the refractive index matching would affect a subject's transparency property have been known in the prior arts. Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of McGlone et al. and Powell et al., and further in view of Chuah et al. to utilize an aralkylsiloxane, which has a high phenyl content, with an antiperspirant active that have a relatively similar refractive index to arrive at the instant claimed invention.

From the teachings of the reference, it is obvious that one of ordinary skill in the art would have had a reasonable expectation of success to arrive at the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

No claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Friday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone

Art Unit: 1616

are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616